DELAWARE INTERSCHOLASTIC ATHLETIC ASSOCIATION

SPORTS MEDICINE ADVISORY COMMITTEE

DSMAC

Sabre Conference Room ,Newark DE

Agenda Dec 3, 2018 , 6-8pm

I. WELCOME, INTRODUCTION

a. **Dr Michael Axe**, Chair/ AOSSM /Sports Orthopedics; **Mr. Tommie Neubauer**, DIAA Executive Director, Officials Rep; **Dr Julie Knowles**, Vice Chair, PT/AT NCC- Sussex Rep/ Prof Reg Board Rep; **Dr. Jeremie Axe**, Southern NCC/Kent Co Physician Rep/ Sports Orthopedics; **Mr Todd Fuhrmann** , ATC Sussex C ATC Rep, AD Rep
Mr Tom Beddow, NCC ATC Rep, Coach Rep**; Dr JT Laws**, Sports PT, Coach Rep; **Ms. Lori Hoffman (McKeanHS)** NCC School Nurses Rep; **Ms Barbara Cilento (Cape HS)** , Kent/Sussex DE School Nurses Rep;. **Dr Joe Straight**, College Rep/Sports Primary Care Rep**; Dr Brad Sandella**, CC Hospital Rep/ Sports Primary Care ;**Ms Mandy Minutola**, Kent County ATC Rep, DATA Rep ; **Dr Brad Bley**, DIAA Board Rep; **Dr Patrick Kane**, Sussex Co Physician Rep/ Sports Orthopedics **Call In**: **Dr Lynn Snyder Mackler**, PT/AT NCAA Competitive Safeguards/ Researcher Rep; **Dr Ken Rogers** ATC AI Ped. Hospital/Research ; ***[Please dial 302-737-8148 to call-in]***

b. **Guests: none**

II. LIASION REPORTS

a. Discussion of

b. Liaison Reports

i. AOSSM, Dr Axe: 2018 Meeting emphasized Pitch counts, Shoulder instability, Meniscal repairs, Gender and ACL grafts (attachments)

ii. School Nurses Association, Ms Hoffman and Cilento- . **Action Item: Mr Neubauer to review and add the few immunization requests to the PPEs** DSNA would like to know if NPs may be added to MD/Dos capable of clearing a concussed athlete for return to play

iii. NATA & DATA, Ms Costello: (DATA Pres) Reminder the school ATCs have permission to hold an athlete from return to play if the ATC can prove the student has not passed RTP criteria, especially in regards to concussions, despite clearance from a physician. ATCS may also pull an athlete of concern from practice etc despite coaching pressure (Uof Maryland)

iv. NFHS, Mr Neubauer : Dr Karissa Niehoff is new Executive Director : playing multiple sports reduces injury risks; Medical "time out" to review EAP prior to the start of a sporting event (see attachment)

v. AMSSM: Dr. Straight/Bley: Sports Med Licensure Clarity Act signed into law 2018; Blood Tests for concussions not a true reality (see attachment)

vi. Hospitals: Dr Rogers/Sandella

vii. NCAA Competitive Safeguards: Dr Snyder-Mackler Air Quality and play (attached)

viii. PT/AT Board: Dr Knowles Licensure renewal end of January

III. Old Business Updates

1. DSMAC preseason policy: **Action Item: Mr Neubauer: the DIAA Acclimitization & Contact Policy has been presented to the DIAA Board for final vote and posting on the DIAA website – As previously discussed this shall apply to all sports or positions requiring helmets and or chest protector, and or shoulder pads.**

https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/.../FAQs%201008.pdf

2. Pitch Count: Mr Beddow requesting small modification
3. **FERPA/HIPAA Action Item: Mr Neubauer to discuss this with DIAA/DOE attorney and the implications of FERPA/HIPAA with non-formalized team physicians**
4. A discussion of the DIAA Survey on Coaching Out of Season
5. Cramp policy update
6. Recommended time between varsity football games

IV. NEW BUSINESS –

a. **Football**- 8th graders playing varsity, 6th graders playing middle school football

b. **PPEs:**

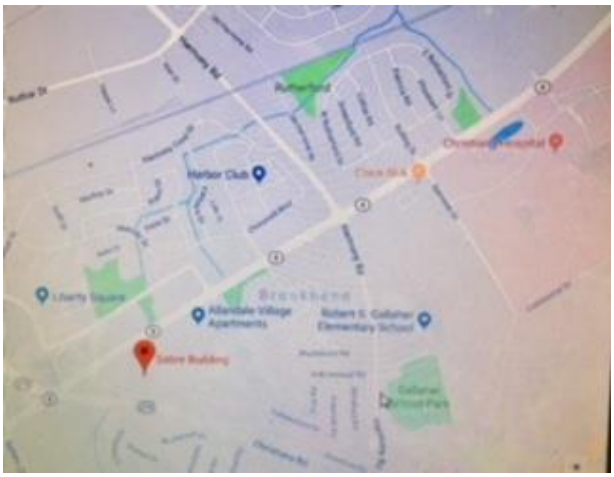
i. Where should PPEs be kept

ii. what info should be made available to ATC staff

iii. Can form be modified to include better ortho information

Next Meeting: First Mondays in December and May, 6-8 pm. Please bring your emailed documents with you to meeting

LOCATION: SABRE CONFERENCE ROOM (SECOND FLOOR)



4051 Stanton- Ogeltown Rd Newark Delaware 19713

DE-1 N/US-13 N. Take exit **162**for **DE-273** toward **Newark/New Castle**. Turn left onto **DE-273 W/Christiana Rd/ Frenchtown Rd W.** Continue to follow DE-273 W. Take the exit toward **Cedarwood Rd**. Continue straight. Destination will be on the right. Enter main entrance and look left for stairs. At top of stairs take a hard left followed by a right. FSO Sabre Conference Room will be down the hall on your left.

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Julie's Cell: 302-236-4681

IF YOU ARE NOT ABLE TO PHYSICALLY ATTEND BUT WANT TO BE CALLED INTO THE CONFERENCE PLEASE .
[Please dial 302-737-8148 to call-in]

'REPLY ALL ' AT LEAST 4 DAYS PRIOR SO THAT DR AXE MAY GIVE YOU CALL IN INFORMATION. IF YOU HAVE ITEMS YOU WANT ADDED TO THE AGENDA, PLEASE SEND BETWEEN 1 AND 2 MONTHS PRIOR TO THE NEXT MEETING

THANK YOU

NEWS RELEAS

Contact Information
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2018 MEETING HIGHLITES

Young Athletes with Shoulder Instability Have Low Revision Rates and High Return to Sport Rates After Arthroscopic Anterior Shoulder Stabilization with Proper Patient Selection, Say Researchers

SAN DIEGO, CA – Young athletes with shoulder instability are considered to be a high-risk group of patients following arthroscopic shoulder stabilization given the high recurrence rates and lower rates of return to sport, which have been reported in the literature. However, according to researchers presenting their work today at the American Orthopaedic Society for Sports Medicine's (AOSSM) Annual Meeting in San Diego outcomes may be improved by proper patient selection and reserving arthroscopic stabilization for athletes with fewer incidents of pre-operative instability.

The senior author of this study, Frank A. Cordasco, MD, MS and his colleagues from the Hospital for Special Surgery in New York City presented a series of patients with shoulder instability between the ages of 14 and 20 who were treated with arthroscopic anterior stabilization performed in the beach chair position by a single surgeon. The primary outcomes were the rates of revision surgery and return to sport at a minimum follow-up of 2 years. Sixty-seven athletes were included in the study with 19 females and 48 males who averaged 17 years of age. There was a low rate of revision surgery of 6% and 82% percent of the athletes returned to sport at an average of 7 months following surgery.

"Our study highlights the importance for young athletes with shoulder instability, undergoing a thorough preoperative evaluation to determine the number of instability events and to obtain appropriate advanced imaging when significant bone loss is suspected. Each pre-operative instability episode can result in greater degrees of bone loss, which results in higher failure rates following arthroscopic shoulder stabilization. This pre-operative approach can determine the best procedure to select from the menu of operations we use to manage shoulder instability," said Cordasco. "This menu includes arthroscopic stabilization, open stabilization and bone augmentation such as the Latarjet reconstruction. Providing the young athlete with the appropriate selection from the menu will to lead to the best outcomes in this high-risk group and will allow them to predictably and reproducibly get back in the game.

Forty-two of the 67 (63%) athletes in this study were indicated for surgery after their first dislocation

and only a few had more than two instability episodes. “We found a gender-specific difference in that all of the six recurrences occurred in males. This study demonstrates that when the high-risk young athlete with fewer episodes of pre-operative instability is treated with an arthroscopic stabilization, the revision surgery rate is low and the return to sport rate is high. Arthroscopic shoulder stabilization may offer the best outcomes in this group when it is performed after the first dislocation. Additional research needs to be performed to continue to improve the outcomes for this challenging group of young, active high-risk athletes,” said Cordasco.

Following Pitch Count Guidelines May Help Young Baseball Players Prevent Injuries

SAN DIEGO, CA – Young pitchers who exceed pitch count limits are more prone to elbow injuries, according to research presented today at the American Orthopaedic Society for Sports Medicine’s Annual Meeting in San Diego. Season statistics of players were compared relative to pitch count limits established by the Japanese Society of Clinical Sports Medicine.

“Our research focused on 149 young pitchers ranging in age from 7 to 11 who had no prior elbow pain,” commented lead author Toshiyuki Iwame, MD, from Tokushima University in Tokushima, Japan. “We found those who reported elbow pain after the season were associated with pitching numbers beyond current throwing guidelines.”

Researchers asked the players to complete a questionnaire after the season, which showed 66 (44.3%) experienced pain. Multivariate analysis showed that throwing more than 50 pitches per day (OR, 2.44; 95% CI, 1.22–4.94), 200 pitches per week (OR, 2.04; 95% CI, 1.03–4.10), and 70 games per year (OR, 2.47; 95% CI, 1.24–5.02), the baselines established by the JSCSM, were risk factors for pain.

“As the demand on young pitchers to play more increases, there is less time for repair of bony and soft tissues in the elbow,” commented Iwame. “We hope research like this continues to direct young athletes, parents and coaches to follow pitch limits to prevent injuries.”

The study authors noted the player recall bias, reporting of pain detail on the questionnaire, and limited geographical representation were limitations of the research.

Surgery Offers Young Patients Long-Term Benefits after Meniscus Tears

SAN DIEGO, CA – Young patients who underwent surgery for isolated meniscus tears between 1990 and 2005 showed positive long-term clinical results, according to new research presented today at the American Orthopaedic Society for Sports Medicine’s Annual Meeting in San Diego. The study represents one of the largest long-term follow-up cohorts describing clinical outcomes of meniscus repair in pediatric patients to date.

“The patients we observed at a long-term follow up had an average IKDC score of 92.3, continuing increases from the pre-operative average of 65.3 and mid-term average of 90.2,” noted corresponding author Aaron Krych, MD, from the Mayo Clinic in Rochester, Minnesota. “These numbers show a significant, lasting improvement in functional outcomes for those involved in this study.”

Researchers examined 32 patients (and 33 knees) at an average follow-up of 17.6 years after surgery. At the time of repair, the average age of patients was 16.1 years. Of the 33 knees included in the study, none had a failed repair since the previous follow-up in 2008. The average Tenger activity score was 6.53, lower than pre-operative 8.33 and mid-term scores of 8.39, though the authors indicated decreasing sports activity with age may be an independent risk factor and not indicative of poorer surgical outcomes.

“Finding the best treatment options for these meniscus tears is important not only to the patient’s immediate recovery, but for long-term health and wellness,” commented Krych. “Our research team believes the data from this study shows the promise of surgery for young patients with these types of injuries.”

Limitations of the work include no MRI data or radiograph images available, and a relatively small patient population despite being one of the largest group studied. Future studies to assess the progression of knee osteoarthritis are recommended.

Results for Female ACL Graft Repair Methods Differ Among Younger Athletes, Say Researchers

SAN DIEGO, CA – Female athletes are two to eight more times likely to injure their ACL than males, however utilizing one graft repair treatment method in females may be more beneficial than another, according to researchers presenting their work today at the American Orthopaedic Society for Sports Medicine’s (AOSSM) Annual Meeting in San Diego.

Young females have been shown in previous literature to have a higher risk for graft failure with very little known about why this occurs. “Our study compared clinical outcomes in young females who had ACL reconstruction using bone-patellar tendon-bone (BTB) and quadrupled hamstring (HS) autografts. Higher rates of re-tears in our patients were seen in our youngest patients using HS autografts,” said senior author, Kevin B. Freedman, MD from the Rothman Institute in Philadelphia, PA.

Freedman and his colleagues reviewed 256 female patients between the ages of 15-25 who underwent primary ACL reconstruction using either the BTB or HS autograft between January 2012 and May 2015. Patients with a prior history of ACL injury to either knee were excluded. The results illustrated that graft re-tear occurred in 6.9% of BTB patients and 13.6% of HS patients. Contralateral ACL tear occurred in 7.4% of BTB patients and 6.2% of HS patients. When researchers broke down the graft tears by age, those in the 15-20-year-old group had a significantly lower rate of re-tear with 6.4% in the BTB compared to 17.5% in the HS group. This same difference was not observed in older females in the 20-25 age group

“More research needs to be performed to better understand female ACL injury and what the best methods for repair are in our youngest patients who are at highest risk of re-injury. We hope that our research will add to the literature and treatment prospects for this complex problem,” said Freedman.

PRESS RELEASE

American Medical Society for Sports Medicine

Back

Why the FDA-Approved Blood Test is Not about Concussions

LEAWOOD, KS — On February 14th, the U.S. Food and Drug Administration (FDA) approved a blood test that has been proposed to diagnose concussion. Many media outlets quickly reported this announcement as being a breakthrough in concussion diagnosis. The blood test, in actuality, is intended to help determine whether or not there may be bleeding or other structural injury in the brain after a head injury, necessitating further imaging with a CT scan. Bleeding, or other gross structural injuries of the brain, are not considered synonymous with a concussion. It is readily accepted that a CT scan is not necessary to diagnose a concussion and will be normal in the overwhelming majority of patients ultimately diagnosed with a concussion.

Currently, this test has only been approved for use in adults, rendering it unusable to the majority of patients with sport-related concussion injury. While the promise of a blood test to help diagnose concussion is exciting, this test unfortunately does not accomplish that. Clarifying this fact to the general public is important, as further marketing or promotion of the test as one for concussion confuses the general public, and may create inappropriate demands for it. This will almost certainly lead to increased health care costs, promote misdiagnosis, and reduce vigilance in the setting of concussion in patients who have a "negative" test.

This test may have clinical utility for a health care provider evaluating an adult patient who demonstrates signs or symptoms that are concerning for bleeding or other structural injury as to whether or not further imaging is truly necessary. Concussions may present with a variety of symptoms and severity of those symptoms.

Finally, blood tests should never take the place of a thorough clinical examination and patient history. The American Medical Society for Sports Medicine (AMSSM) strongly recommends that patients with a suspected concussion be evaluated by a healthcare provider with experience and expertise in diagnosis and management of concussion. The AMSSM has a network of over 3,600 physicians with training in concussion diagnosis and management.

About the AMSSM: AMSSM is a multi-disciplinary organization of sports medicine physicians dedicated to education, research, advocacy and the care of athletes of all ages. The majority of AMSSM members are primary care physicians with fellowship training and added qualification in sports medicine who then combine their practice of sports medicine with their primary specialty. AMSSM includes members who specialize solely in non-surgical sports medicine and serve as team physicians at the youth level, NCAA, NFL, MLB, NBA, WNBA, MLS and NHL, as well as with Olympic and Paralympic teams. By nature of their training and experience, sports medicine physicians are ideally suited to provide comprehensive medical care for athletes, sports teams or active individuals who are simply looking to maintain a healthy lifestyle. www.amssm.org

NOTE: For more information, please contact the AMSSM, 4000 W. 114th St., Suite 100, Leawood, KS 66211, (913) 327-1415.

Air Quality

In September 2018, the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports updated its 2016 guidance related to student-athlete practice and competition activities in poor air quality conditions: This guidance is provided below:

There are three reasons why otherwise healthy athletes are at special risk for inhaling pollutants. First, as physical activity increases minute ventilation, the number of pollutants that are inhaled relative to when the athlete is at rest are increased. Second, during activity, a larger proportion of air is inhaled through the mouth, which bypasses the body's built-in nasal filtration system. Third, pollutants are inhaled more deeply and may diffuse into the bloodstream more quickly during physical activity. These risks are heightened in athletes with pre-existing pulmonary or cardiac conditions.[1]

An important and standardized national air quality resource is the National Weather Service's (NWS) Air Quality Forecast System. This system "provides the US with ozone, particulate matter and other pollutant forecasts with enough accuracy and advance notice to take action to prevent or reduce adverse effects." (Accessed 7/14/18;).

A key component of this forecast system is the NWS Air Quality Index (AQI).2The AQI provides real-time monitoring and alerts in response to changing air quality levels. The AQI accounts for five different pollutants, including: 1) ground-level ozone; 2) particle pollution (also known as particulate matter); 3) carbon monoxide; 4) sulfur dioxide; and 5) nitrogen dioxide. Of these, ground-level ozone and particulate matter are the most common and most concerning pollutants for outdoor physical activity. The AQI is a single number, presented on a scale of 0 – 500, where 0 indicated no air quality problems and 500 indicates the most hazardous levels of air pollution. A specialized version of the AQI for particle pollution is also available and should be consulted in those situations when threats to air quality come from wildfires, road dust, and agricultural operations.[2]

When threatening or dangerous air quality levels are present the AQI increases, and the National Weather Service (NWS) issues a corresponding air quality alert. Those alerts and their corresponding behavioral modification recommendations for particle pollution can be found at https://www.airnow.gov.[2]

Consistent with this information, the Committee on Competitive Safeguards and Medical Aspects of Sports offers the following general guidance to member institutions trying to make decisions about the appropriateness of practice or competition in degrading air quality situations:

- Attentive monitoring of local AQI and associated air quality alerts, especially during times of extreme environmental conditions, is recommended. This monitoring is best performed by the primary athletics healthcare providers trained to monitor environmental impacts on student-athlete health and safety. However, schools may choose to delegate this responsibility to another staff member with knowledge and training about environmental monitoring.
- Member schools should consider shortening or canceling outdoor athletic events (practices and competitions) in accordance with AQI guidance. Exposure should be managed more conservatively for student-athletes with pre-existing pulmonary or cardiac conditions, which may exacerbate the complications of these conditions and lead to an acute medical emergency. Specifically, at an AQI of 100 or higher, schools should consider removing sensitive athletes from outdoor practice or competition venues and should closely monitor all athletes for respiratory difficulty.2 Reduce heavy or prolonged exertion in sensitive individuals.
- At AQIs of over 150, outdoor activities should be shortened, and exertion should be minimized by decreasing the intensity of activity. Sensitive athletes should be moved indoors.2
- At AQIs of 200 or above, serious consideration should be given to rescheduling the activity or moving it indoors. Prolonged exposure and heavy exertion should be avoided.2 Avoid all outdoor physical activity for sensitive individuals .

- At AQIs of 300 or above, outdoor activities should be moved indoors or canceled if indoor activity is not an option.2
- School emergency action plans should guide the emergency care response in these circumstances, and staff should rehearse the plan at a minimum of once a year.

References

1. Carlisle AJ, Sharp NC. Exercise and outdoor ambient air pollution. Br J Sports Med. 2001;35(4):214-222.

2. United States Environmental Protection Agency. Air quality guide for particle pollution. 2016; https://www.airnow.gov/index.cfm?action=pubs.aqguidepart. Accessed July 18, 2018.